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10/036,604

Case No. 5388

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:

Brian G. Morin et al.

Serial Number:

10/036,604

Filed:

December 21, 2001

For:

**LOW-SHRINK  
POLYPROPYLENE  
TAPE FIBERS**

Group Art Unit:

1771

Examiner:

C. Juska

**RECEIVED  
JAN 14 2004  
TC 1700**

**DECLARATION UNDER 37 C.F.R. § 1.132**

Mail Stop Non-Fee Amendment  
Honorable Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I, Brian M. Burkhardt, declare the following:

1. I received a Bachelor of Science degree in Biochemistry and a Doctorate in Chemistry, both from The Ohio State University, in Columbus, Ohio.
2. For the last two and-a-half (3 ½) years I have been employed by Milliken & Company located in Spartanburg, South Carolina.
3. My experience in the chemical industry has been devoted x-ray scattering analyses, utilizing both small angle and wide angle types, and their application to such materials as proteins, thermoplastics, small molecules, and combinations of thermoplastics and small molecules. My current position with Milliken & Company is as a Senior Development Chemist with Milliken Chemical Division.

4. For the last two and-a-half (3 ½) years with Milliken & Company, my work has primarily focused on new product development of thermoplastic additives with an emphasis on the structure/function relationship between small molecule additives and thermoplastics.
5. I am familiar with the above-referenced patent application as well as Japanese Patent Application Number 11-259648 (Publication Number 2001-081628). It is clear that the pending claims of the above-referenced application require a certain x-ray scattering pattern such that the center of the scattering peak is at 0.4 degrees or lower when analyzed under small angle x-ray scattering. It is also clear that the '648 Application does not require nor discuss any such specific x-ray scattering pattern for the disclosed fibers within the disclosed base cloth.
6. I have undertaken some comparative experiments to determine the possible x-ray scattering patterns in terms of the center of the scattering peak thereof for the '648 Application fibers disclosed therein (see the attached Comparison Examples). Such data show that the '648 Application fibers do not meet the same scattering pattern as now required and, in fact, exhibit a center for the scattering peak in excess of 0.6, far higher than that now claimed.
7. Thus, in my opinion, the specific teachings of the '648 Application do not accord the same polypropylene fibers as now claimed. Hence, in my opinion, such a comparison shows the lack of anticipation of the presently claimed invention by the '648 Application's teachings and is also relevant as indicia of nonobviousness of the presently claimed invention as well.
8. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the above-referenced application or any patent issuing thereon.

Name:	Brian M. Burkhart
Residence:	Greenville, South Carolina
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Date: \_\_\_\_\_

## **Comparative Examples**

### **Sample Generation**

Polypropylene fibers were made in accordance with paragraph 0014 of the '648 Application, one set with NA-11 as the organic phosphoric-acid metal salt as the nucleating additive therein, one with MDBS (Millad® 3940) as the nucleating additive, and one with DMDBS (Millad® 3988) as the nucleating additive, through the initial production of films thereof. The films were then slit as noted into fibers and heated and annealed at the temperatures noted within this same paragraph. The resultant fibers were then measured for x-ray scattering patterns as noted within the present application's example section.

The attached graph (plotting the two theta distance from the center of the scattering peak versus ???) shows that each sample exhibited a center for the scattering peak of greater than 0.4, in fact, higher than 0.6.

In furtherance of the Declaration to which this page is attached, I, Brian M. Burkhart, do solemnly attest to the fact that I performed the above analysis of the comparative and inventive fibers.

Date:

\_\_\_\_\_  
Brian M. Burkhart

